WHAT IS CLAIMED IS:

1. A pharmaceutical composition for treating cell proliferative disorders comprising a pharmaceutically acceptable carrier, a therapeutically effective amount of TGF-α, TGF-α-related polypeptide, or a functional fragment of TGF-α or TGF-α-related polypeptide.

2. The pharmaceutical composition of claim 1, further comprising a therapeutically effective amount of a chemotherapeutic agent.

3. The pharmaceutical composition according to claim 2, wherein said chemotherapeutic agent is selected from the group consisting of alkylating agents, DNA strand-breaking agents, intercalating topoisomerase II inhibitors, nonintercalating topoisomerase II inhibitors, DNA minor groove binders, antimetabolites, tubulin-binding agents that when bound to tubulin prevent formation of microtubules, hormones, asparaginase and hydroxyurea.

4. The pharmaceutical composition according to claim 2, wherein said chemotherapeutic agent is selected from the group consisting of asparaginase, hydroxyurea, cisplatin, cyclophosphamide, altretamine, bleomycin, dactinomycin, doxorubicin, etoposide, teniposide, and plicamycin.

5. The pharmaceutical composition according to claim 2, wherein said chemotherapeutic agent is selected from the group consisting of methotrexate, fluorouracil, fluorodeoxyuridine, CB3717, azacitidine, cytarabine, floxuridine, mercaptopurine, 6-thioguanine, fludarabine, pentostatin, cyctrabine, and fludarabine.

6. A method of treating a cell proliferative disorder in a mammal comprising administering to a subject in need thereof, a therapeutically effective amount of TGF-α, TGF-α-related polypeptide, or functional fragment thereof, thereby treating the disorder.

7. The method according to claim 6, wherein from about 1.0 ug/kg body weight to about 100 mg/kg body weight of TGF-α, TGF-α-related polypeptide or TGF-α or TGF-α-related polypeptide functional fragment is administered.

8. The method of claim 6, further comprising administering a therapeutically effective amount of a chemotherapeutic agent.

9. The method of claim 6, wherein from about 0.5 mg/kg body weight to about 40 mg/kg body weight of said chemotherapeutic agent is administered.

10. The method according to claim 6, wherein the TGF-α is administered orally, enterically, intravenously, peritoneally, parenterally or by injection into a tumor.

11. The method according to claim 8, wherein said chemotherapeutic agent is selected from the group consisting of alkylating agents, DNA strand-breaking agents, intercalating topoisomerase II inhibitors, nonintercalating topoisomerase II inhibitors, DNA minor groove binders, antimetabolites, tubulin-binding agents that when bound to tubulin prevent formation of microtubules, hormones, asparaginase and hydroxyurea.

12. A method according to claim 8, wherein said chemotherapeutic agent is selected from the group consisting of Asparaginase, hydroxyurea, Cisplatin, Cyclophosphamide, Altretamine, Bleomycin, Dactinomycin, Doxorubicin, Etoposide, Teniposide, and Plicamycin.

13. The method according to claim 8, wherein said chemotherapeutic agent is selected from the group consisting of Methotrexate, Fluorouracil, Fluorodeoxyuridine, CB3717, Azacitidine, Cytarabine, Floxuridine, Mercaptopurine, 6-Thioguanine, Fludarabine, Pentostatin, Cyctrabine, and Fludarabine.

14. The method of according to claim 8, wherein said chemotherapeutic agent is Uracil mustard, Chlormethine, Cyclophosphamide, Ifosfamide, Melphalan, Chlorambucil, Pipobroman, Triethylenemelamine, Triethylenethiophosphoramine, Busulfan, Carmustine, Lomustine, Streptozocin, Dacarbazine, Temozolomide, Methotrexate, 5-Fluorouracil, Floxuridine, Cytarabine, 6-Mercaptopurine, 6-Thioguanine, Fludarabine phosphate, Pentostatine, Gemcitabine, Vinblastine, Vincristine, Vindesine, Bleomycin, Dactinomycin, Daunorubicin, Doxorubicin, Epirubicin, Idarubicin, Paclitaxel, Mithramycin, Deoxycoformycin, Mitomycin-C, L-Asparaginase, Interferons, Etoposide, Teniposide 17.alpha.-Ethinylestradiol, Diethylstilbestrol, Testosterone, Prednisone, Fluoxymesterone, Dromostanolone propionate, Testolactone, Megestrolacetate, Tamoxifen, Methylprednisolone, Methyltestosterone, Prednisolone, Triamcinolone, Chlorotrianisene, Hydroxyprogesterone, Aminoglutethimide, Estramustine, Medroxyprogesteroneacetate, Leuprolide, Flutamide, Toremifene, Goserelin, Cisplatin, Carboplatin, Hydroxyurea, Amsacrine, Procarbazine, Mitotane, Mitoxantrone, Levamisole, Navelbene, CPT-11, Anastrazole, Letrazole, Capecitabine, Reloxafine, Droloxafine, or Hexamethylmelamine.

15. The method of claim 6, wherein said cell proliferative disorder is lung cancer, pancreatic cancer, colon cancer, myeloid leukemia, melanoma, glioma, thyroid follicular cancer, bladder carcinoma, myelodysplastic syndrome, breast cancer, low grade astrocytoma, astrocytoma, glioblastoma, medulloblastoma, renal cancer, prostate cancer, endometrial cancer and neuroblastoma.

16. The method of claim 6, further comprising radiation therapy.

17. The method of claim 8, wherein TGF-α and said chemotherapeutic agent are administered simultaneously.

18. The method of claim 8, wherein TGF-α and said chemotherapeutic agent are administered sequentially.

19. The method of claim 8, wherein said chemotherapeutic agent is administered prior to TGF-α.

20. A method of treatment of a cell proliferative disorder in a subject in need thereof comprising introducing into cells of a host subject, an expression vector comprising a polynucleotide sequence encoding TGF-α or a biologically functional fragment thereof, in operable linkage with a promoter.

21. The method of claim 20, wherein the expression vector is introduced into the subject's cells *ex vivo* and the cells are then reintroduced into the subject.

22. The method of claim 20, wherein the expression vector is an RNA virus.

23. The method of claim 22, wherein the RNA virus is a retrovirus.

24. The method of claim 20, wherein the subject is a human.